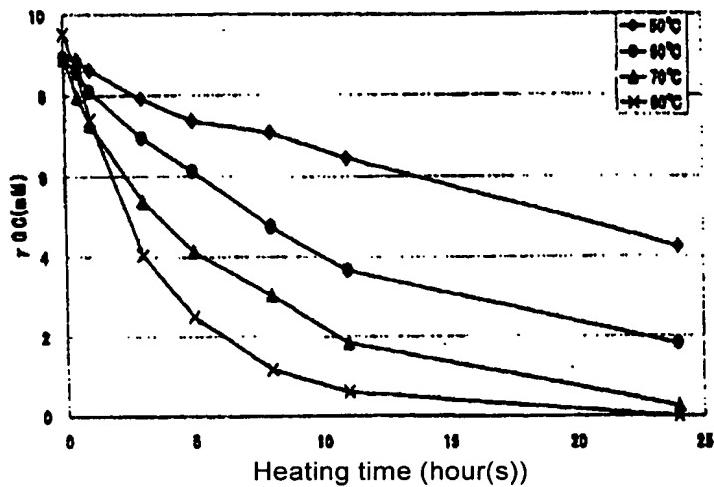
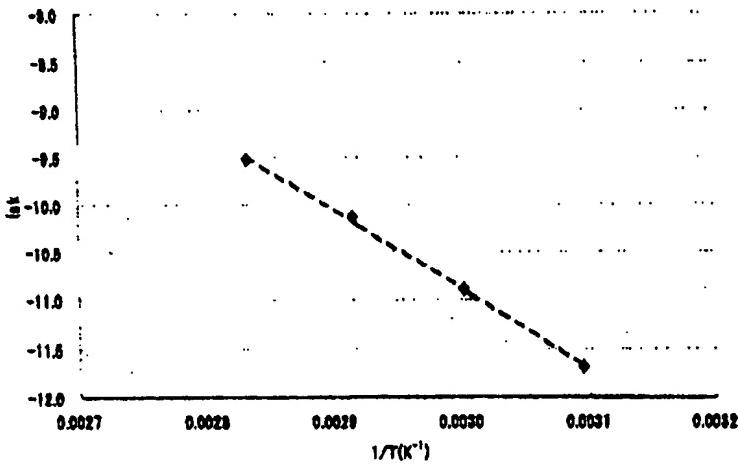


**Fig. 1A Decomposition Reaction of 10 mM  $\gamma$ -GC**

**Changes in decomposition of  $\gamma$ -GC with a lapse of time**

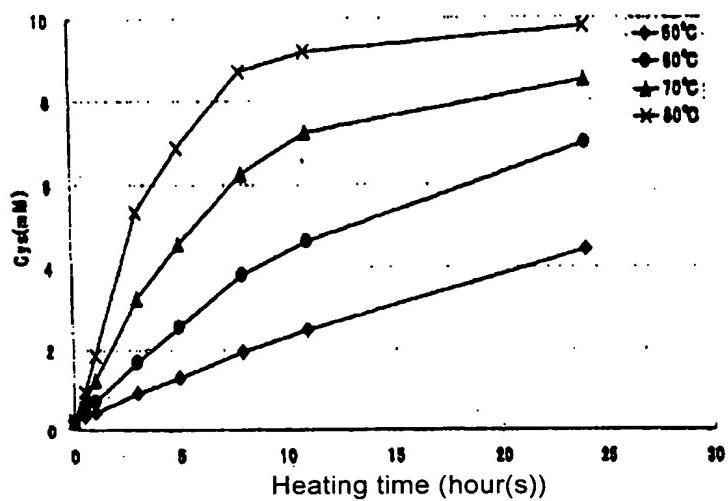


**Arrhenius plots of decomposition of  $\gamma$ -GC**

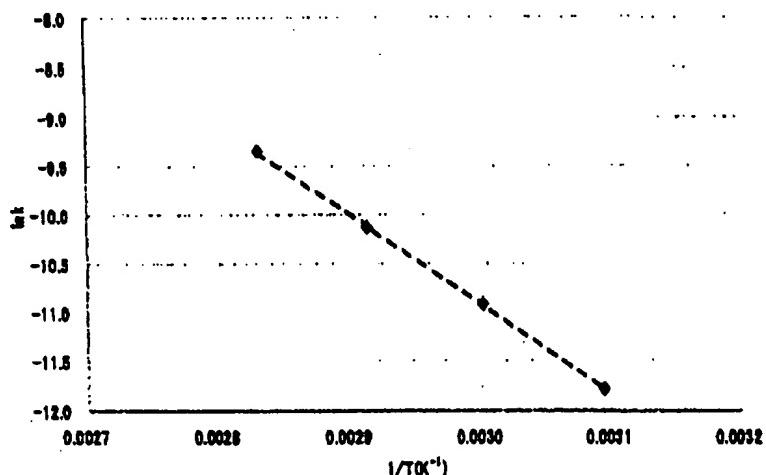


**Fig. 1B Decomposition Reaction (Production of Cys) of 10 mM  $\gamma$ -GC**

**Changes in production of Cys with a lapse of time**

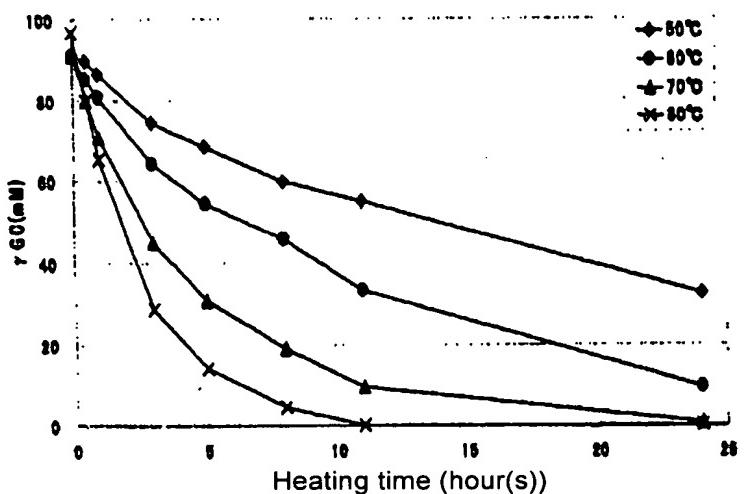


**Arrhenius plots of production of Cys**

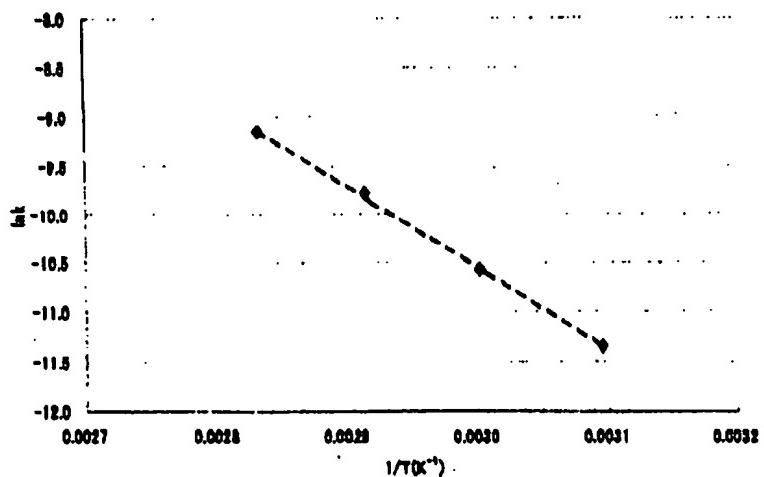


**Fig. 1C Decomposition Reaction of 100 mM  $\gamma$ -GC**

**Changes in decomposition of  $\gamma$ -GC with a lapse of**



**Arrhenius plots of decomposition of  $\gamma$ -GC**



**Fig. 1D Decomposition Reaction (Production of Cys) of 100 mM  $\gamma$ -GC**

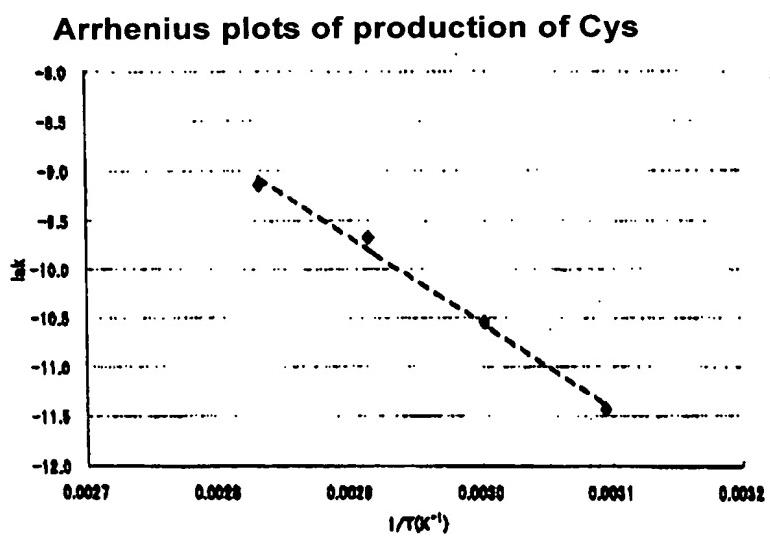
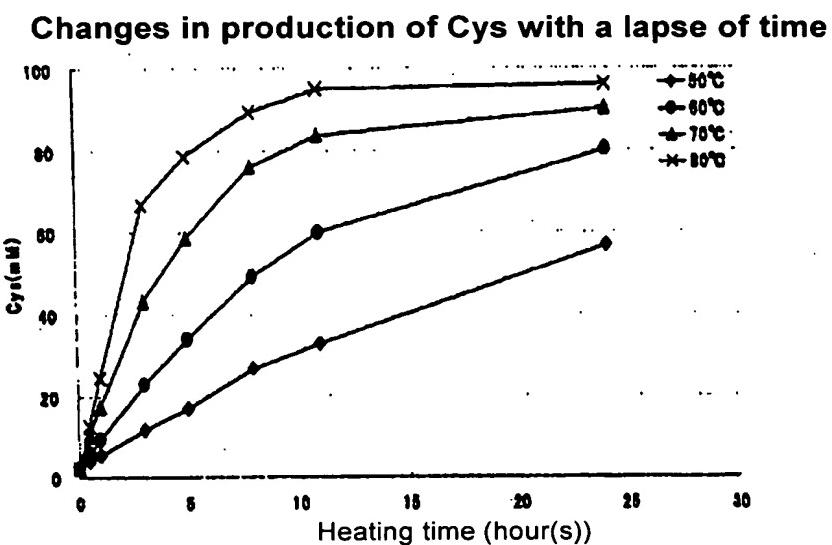
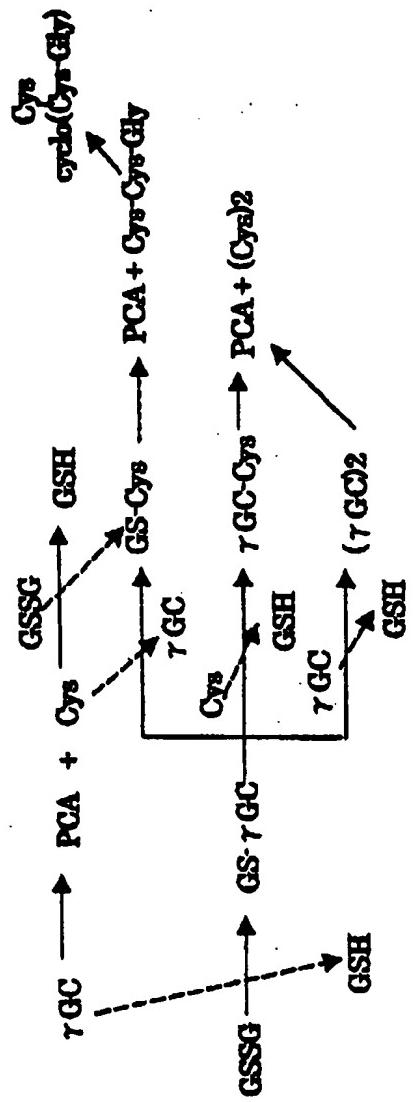
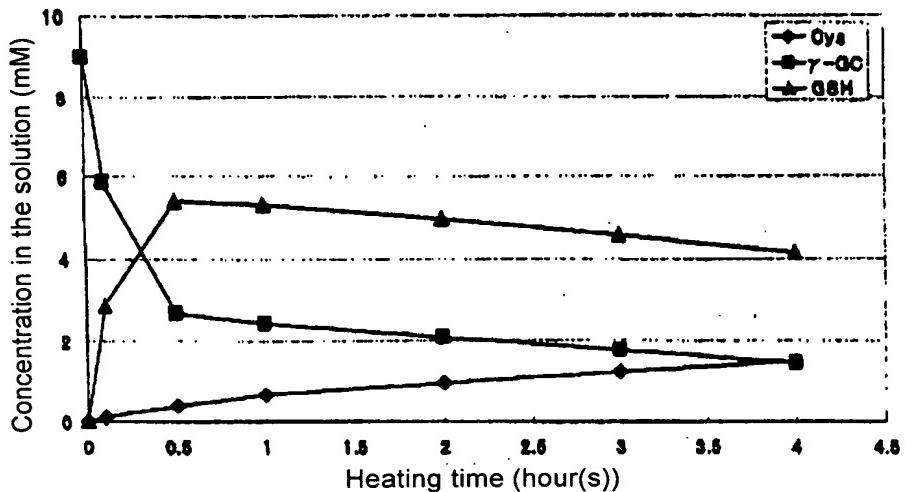


Fig. 2

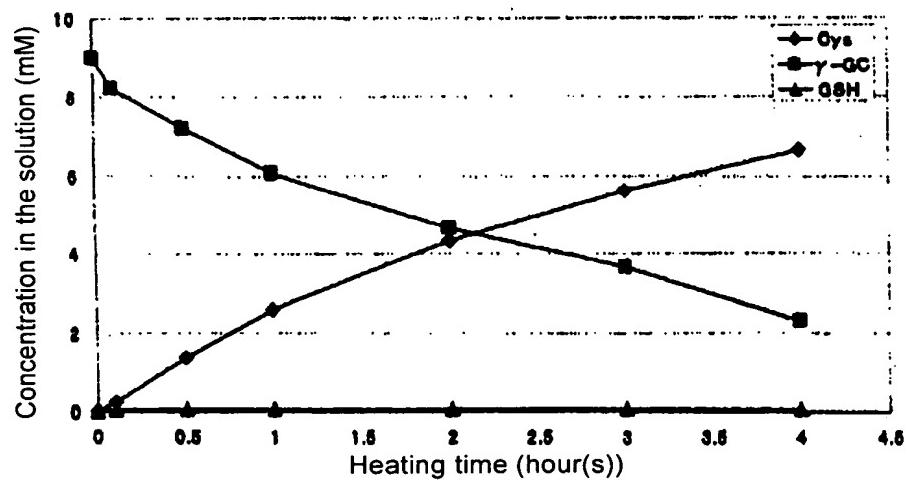


**Fig. 3 Heating reaction in the coexistence and absence of GSSG**

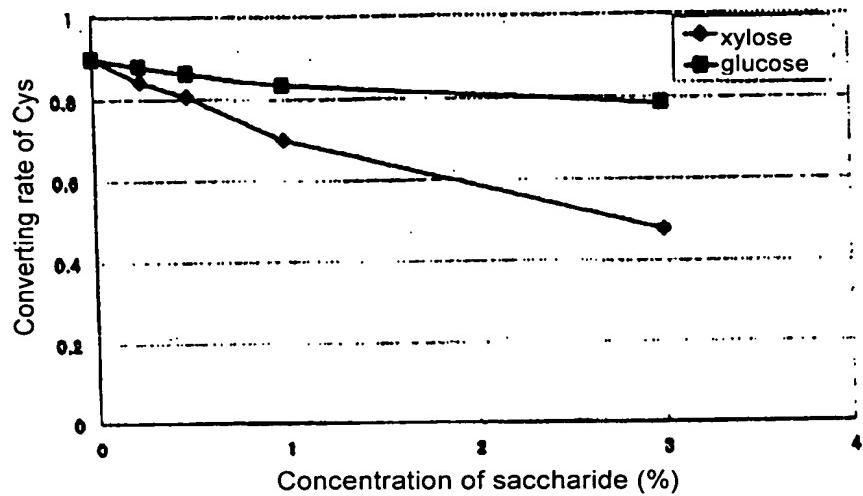
**(a) Heating reaction in the coexistence of 10 mM GSSG**



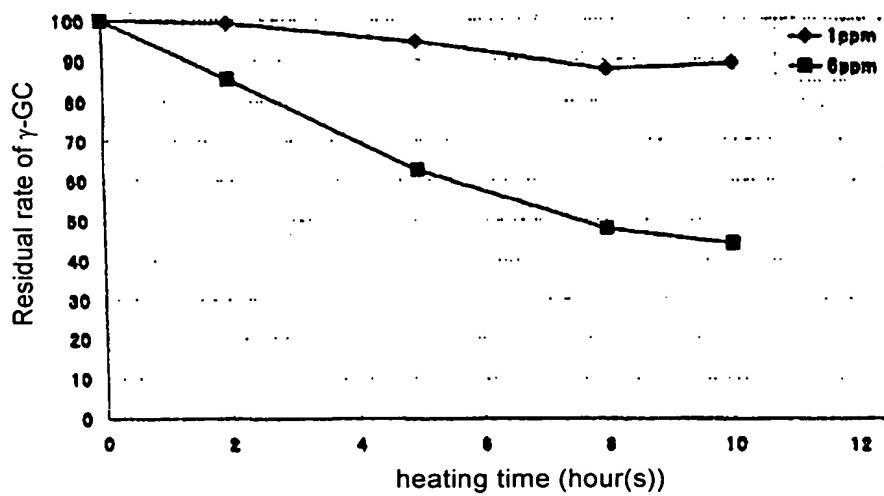
**(b) Heating reaction in the absence of GSSG**



**Fig. 4 Converting rate of Cys in the presence of a saccharide**

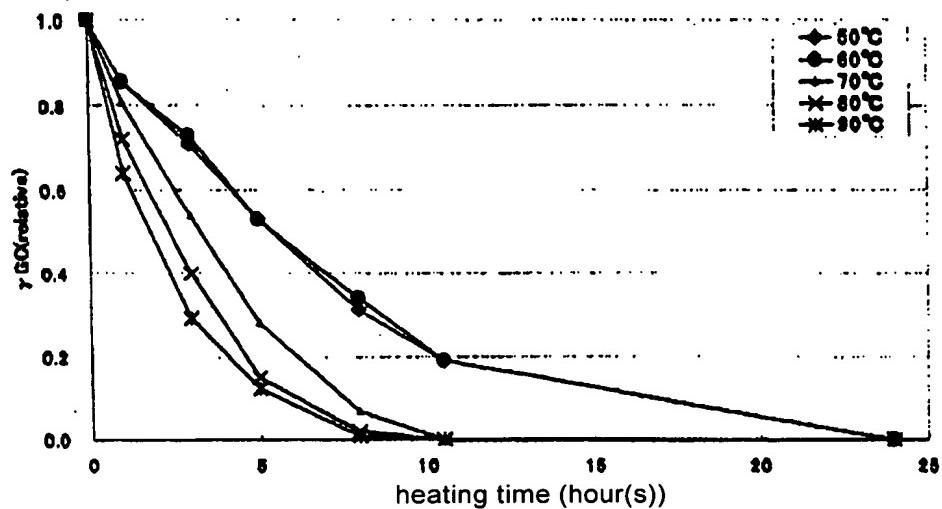


**Fig. 5 Residual rate of  $\gamma$ -GC in the presence of dissolved oxygen**

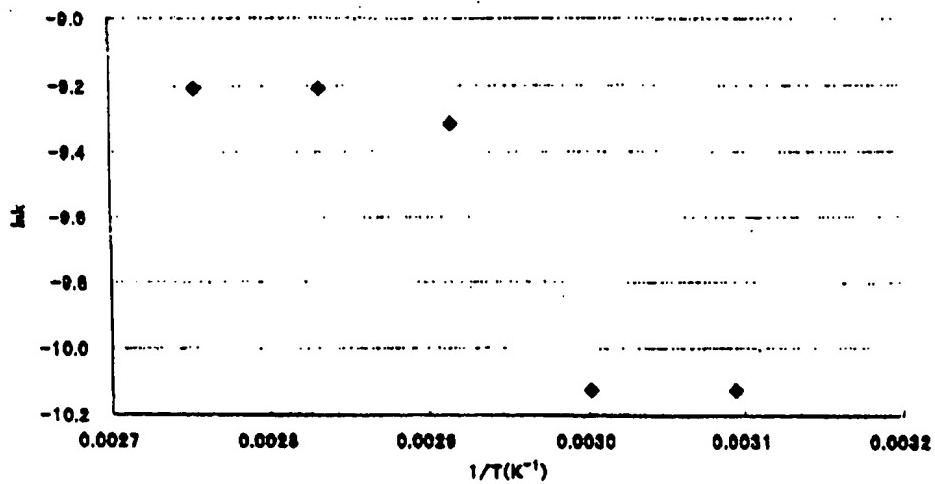


**Fig. 6A Decomposition reaction of  $\gamma$ -GC in the case of 3% in DM**

**(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 3% in DM**

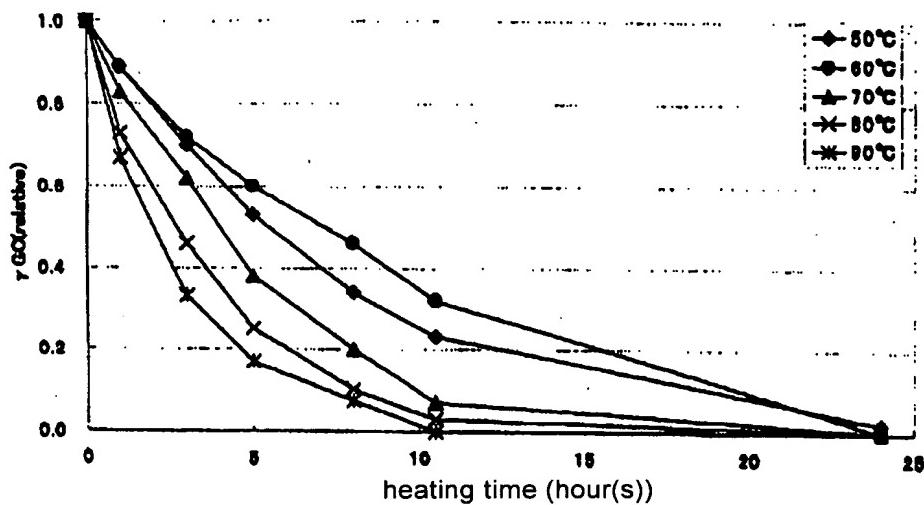


**(b) Arrhenius plots in the case of 3% in DM**

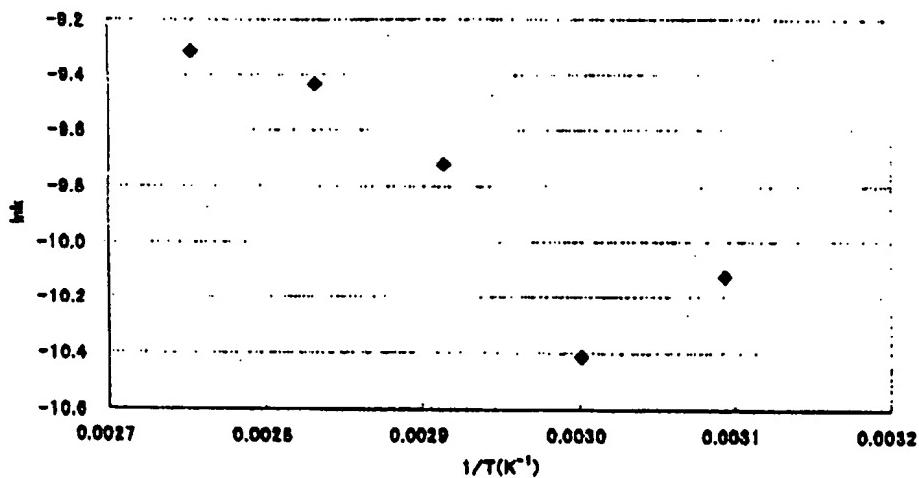


**Fig. 6B Decomposition reaction of  $\gamma$ -GC in the case of 5% in DM**

**(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 5% in DM**

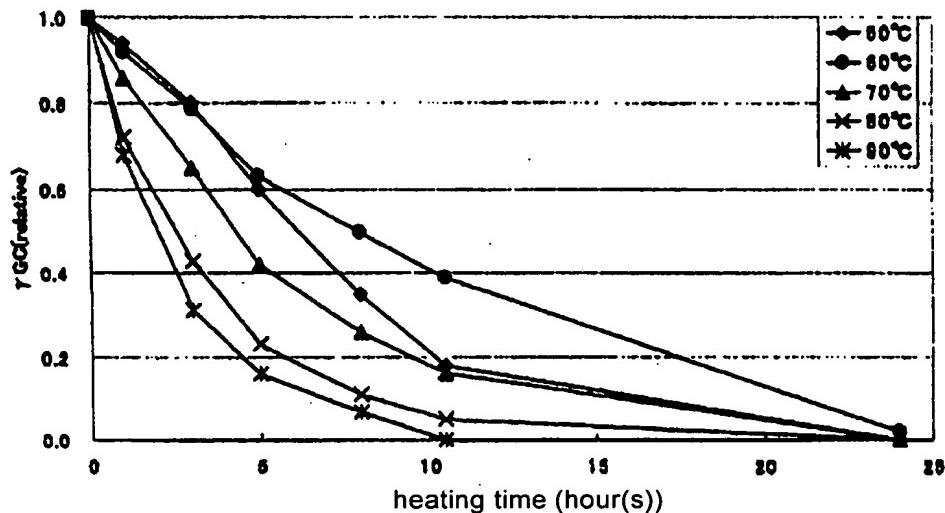


**(b) Arrhenius plots in the case of 5% in DM**

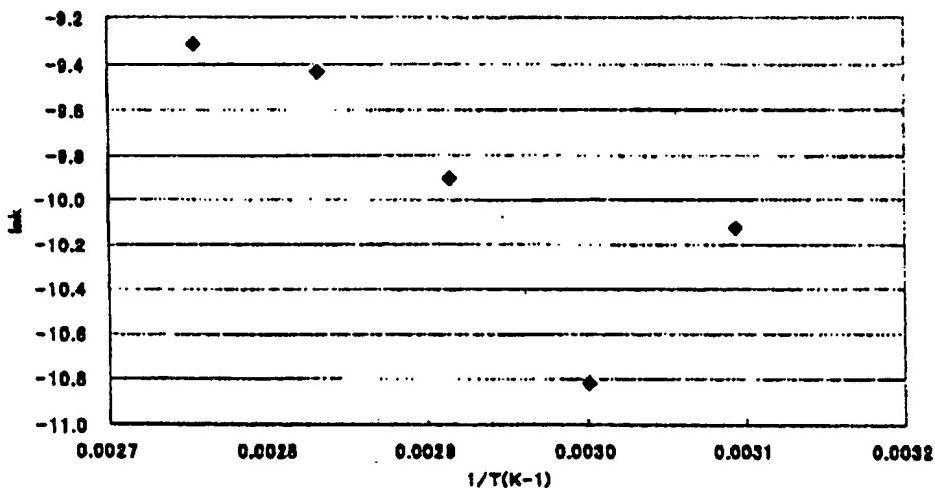


**Fig. 6C Decomposition reaction of  $\gamma$ -GC in the case of 8% in DM**

**(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 8% in**

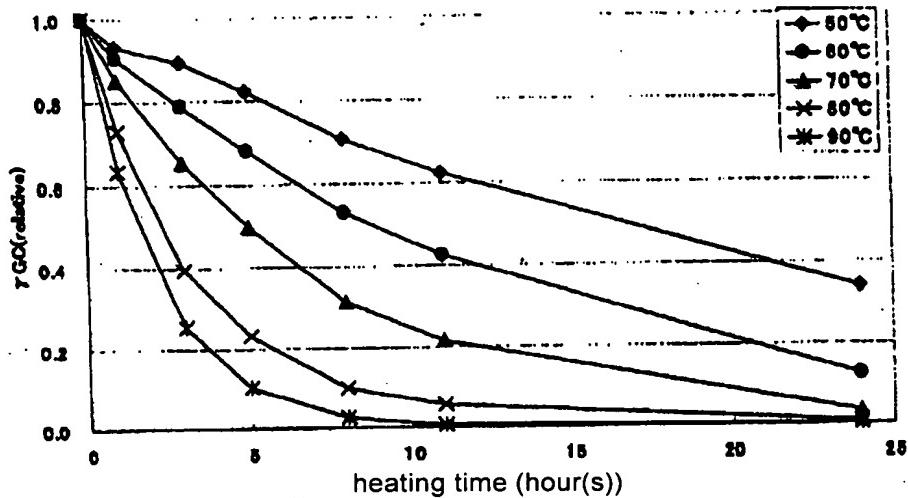


**(b) Arrhenius plots in the case of 8% in DM**

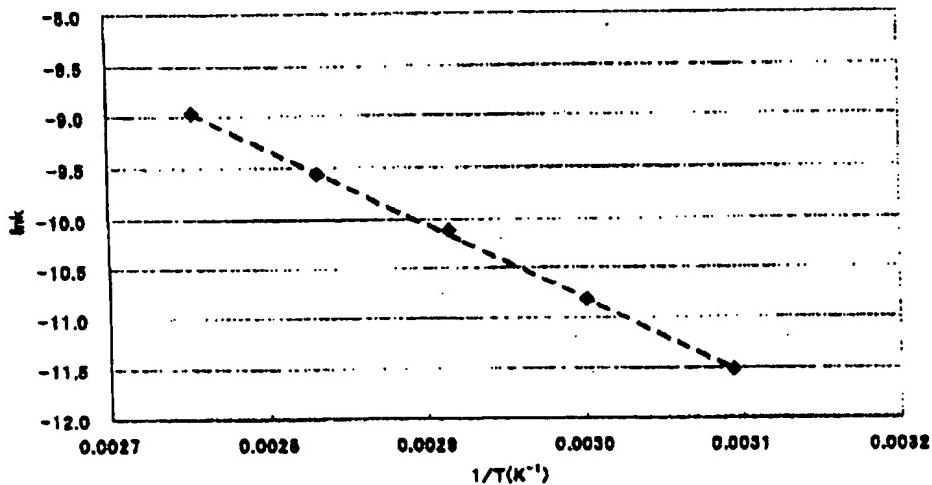


**Fig. 6D Decomposition reaction of  $\gamma$ -GC in the case of 10% in DM**

(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 10% in

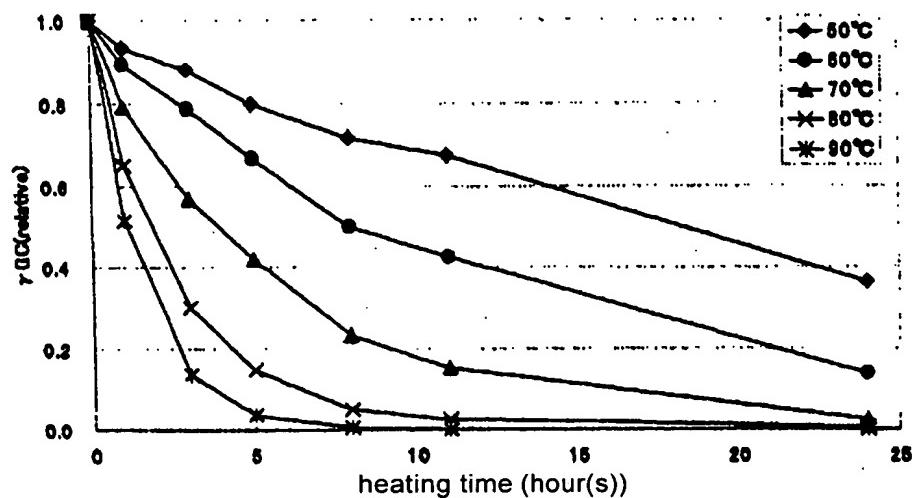


(b) Arrhenius plots in the case of 10% in DM

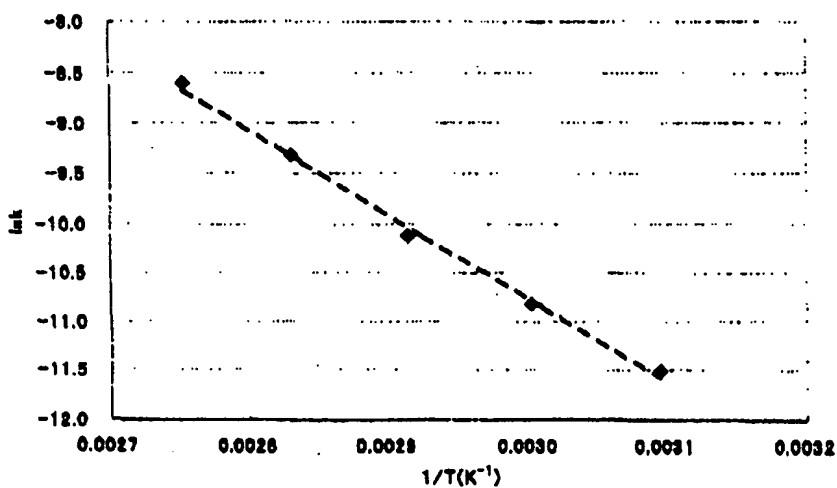


**Fig. 6E Decomposition reaction of  $\gamma$ -GC in the case of 20% in DM**

**(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 20% in DM**

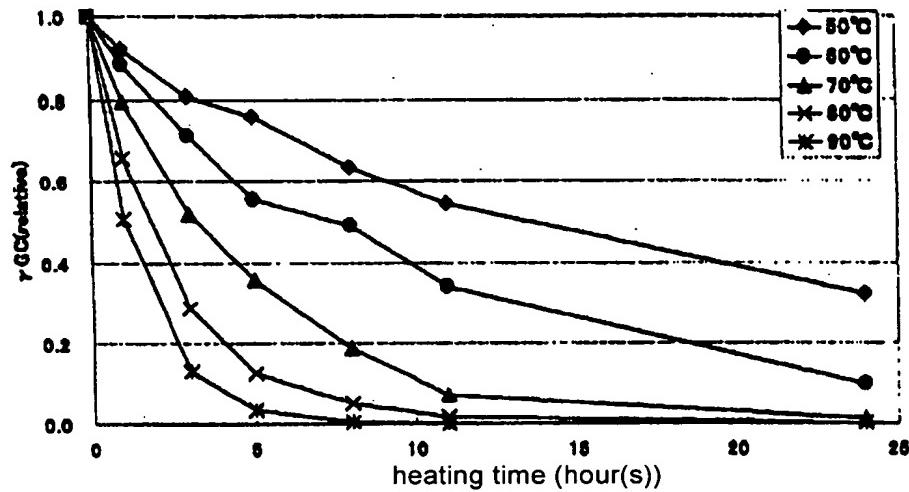


**(b) Arrhenius plots in the case of 20% in DM**



**Fig. 6F Decomposition reaction of  $\gamma$ -GC in the case of 30% in DM**

**(a) Changes in decomposition of  $\gamma$ -GC with a lapse of time in the case of 30% in DM**



**(b) Arrhenius plots in the case of 30% in DM**

